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Floodlights *and* Industrial Units

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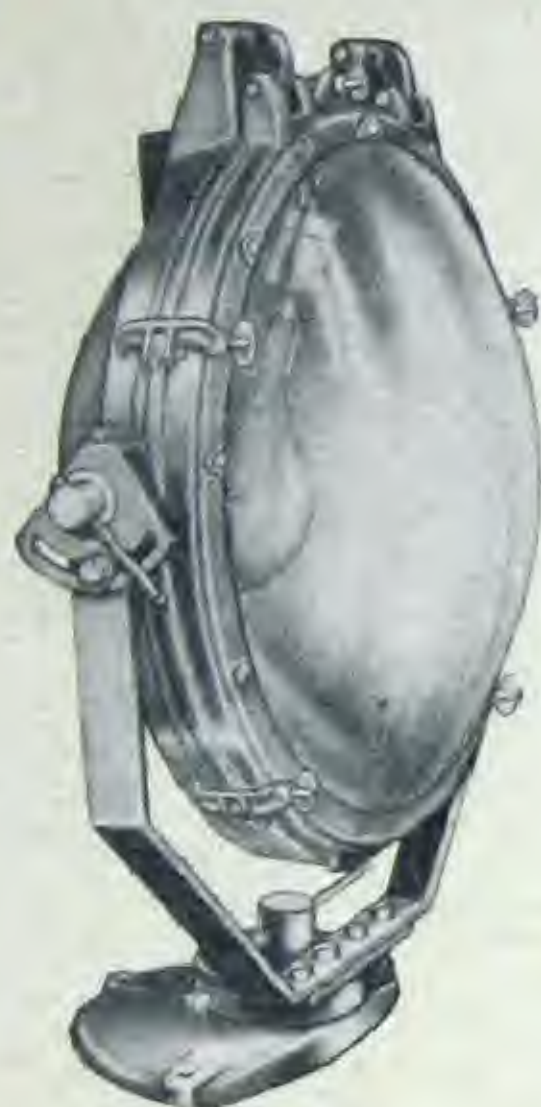
MILWAUKEE



BULLETIN 2106

February 1, 1928

LCE SERIES FLOODLIGHT PROJECTORS



Type LCE24
Standard Mounting



Type LCE20
Simple Trunnion Mounting

THE floodlight projectors shown in this bulletin represent the latest advance in floodlighting practice. They are equipped with reflectors which intercept a much larger proportion of the light from the lamp than do the ordinary floodlights. This increased efficiency allows large areas to be lighted with a smaller number of projectors, with a corresponding decrease in installation cost, lighting load, and maintenance cost. The LCE floodlights are made in four sizes with diameters ranging from 9 $\frac{5}{8}$ inches to 24 inches.

The cast iron and cast aluminum alloy cases of these floodlight projectors are dust-tight and weather-proof. The large radiating surface makes ventilation unnecessary. It has formerly been the practice to ventilate floodlights, but recent developments have shown that it is much better to make the floodlight dust-tight and take care of the heat by radiation. In a projector which is ventilated, the stream of air passing through carries with it all the dust and gas present in the atmosphere. The dust collects on the reflector, lamp, and lens, and soon cuts the light output to a small fraction of its initial value. This dust is difficult to remove, and proper maintenance demands very frequent cleaning. The LCE projectors are so designed that they stay clean on the inside and an occasional wiping off of the outside of the lens will keep them operating at full efficiency.

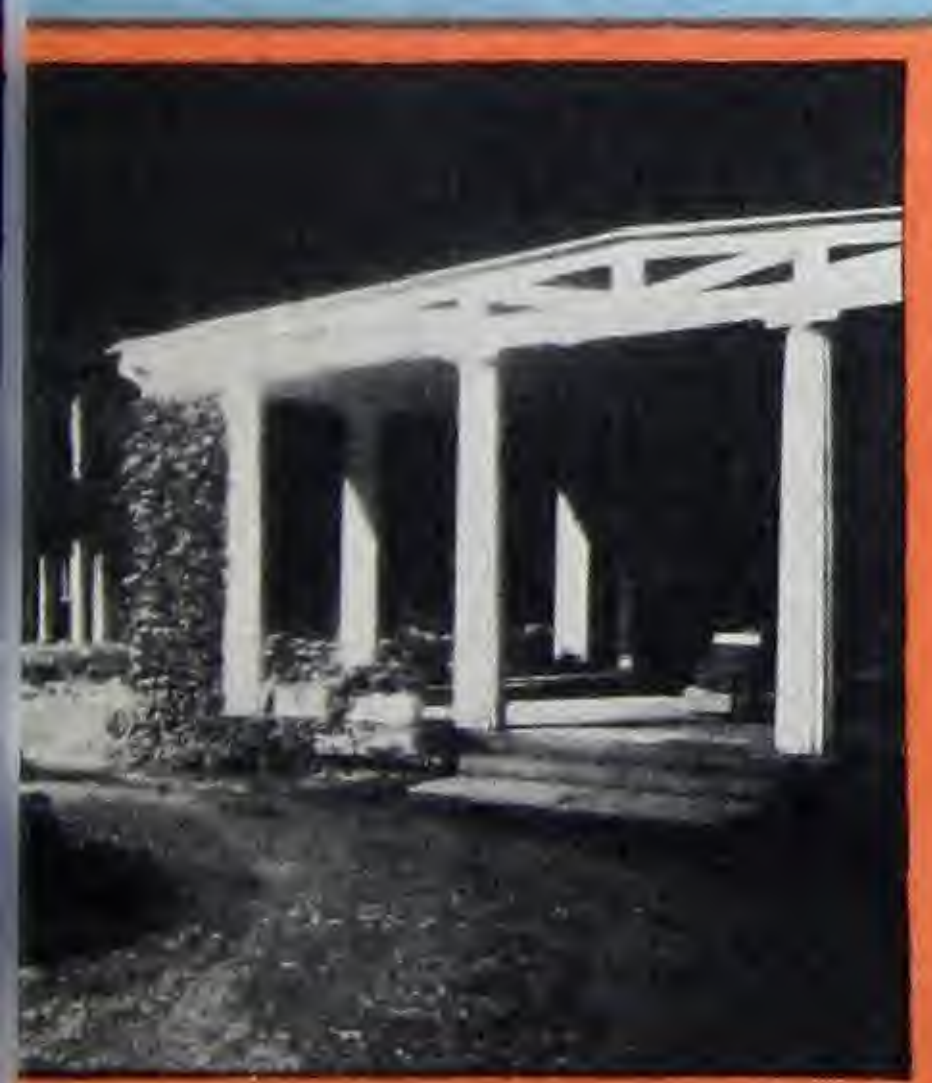
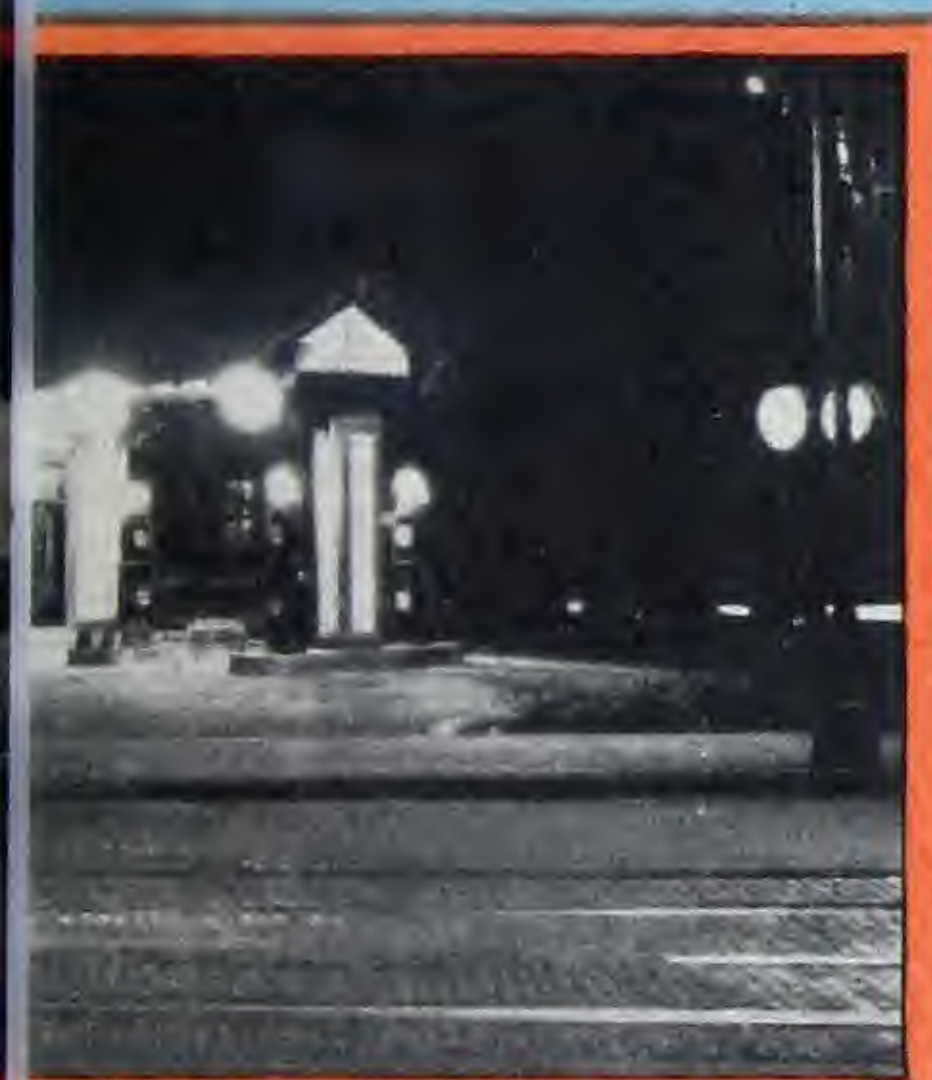
Floodlight projectors are often mounted on the edge of tower platforms or roofs and unless special provision is made, it is practically impossible to clean and relamp the projector without losing the original setting of the floodlight and having to adjust it again at night. To provide for this, type LCE projectors can be equipped with two very simple devices, by means of which the projector can be turned around, tipped completely over, or both, for convenience in relamping and cleaning and then returned to its exact original setting without further adjustments. These devices are known as adjustable stops.



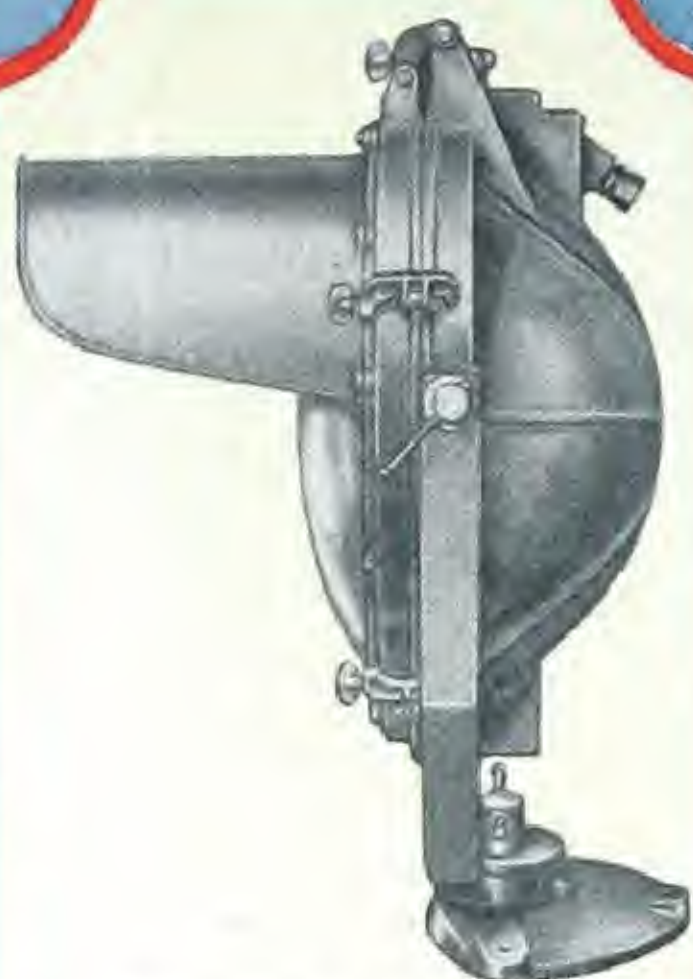
FLOODLIGHTING



SUGGESTIONS



LCE SERIES FLOODLIGHT PROJECTORS



Type LCE24 with Hood



Type LCE16
Trunnion Mounting with
Adjustable Stops



Type LCE16
Simple Trunnion Mounting

When floodlight projectors are used for lighting railroad or factory yards, the area immediately beneath the projector between the tower and place where the beam strikes, is often quite dark. The LCE floodlight projectors can be supplied with a large cast iron or cast aluminum alloy hood which reflects part of the stray light above the beam to the ground. The hood also prevents dust and soot from falling on the lens.

The lamps most commonly used with types LCE20 and LCE24 projectors are the standard lighting service lamps, 750 or 1000-watt PS-52, or 500 or 1000-watt G-40 bulbs for the LCE20; and 750 to 1500-watt PS-52, or 500 to 1500-watt G-40 bulbs for the LCE24. The most efficient lamp for the type LCE12 projector is 200-watt PS-30, or 250-watt G-30 bulb. Type LCE16 projector takes 300 or 500-watt PS bulb, or 500-watt G-40 bulb. Types LDA and LDE take 94, 100, or 150-watt P-25 concentrated filament lamp. Most floodlight installations do not call for extremely high beam candlepower, but rather for an even distribution of light over a fairly large surface. The standard lamps should be used wherever possible on account of their higher efficiency, lower cost, and longer life. When a very narrow beam of light of high beam candle power is required, it can be obtained with these same projectors by the use of concentrated filament lamps. They can be obtained in the standard PS-52 bulb by specifying type C-5 filament. These lamps are interchangeable with the standard lighting service lamps which have type C-7A filaments. Concentrated filament lamps in the G bulb must be burned base down, and if it is desired to use these lamps, types LCE12, LCE16, LCE20, and LCE24 projectors can be supplied with the lamp receptacle in the bottom of the case. This will be done without additional charge, if specified on the order. The lamp receptacle furnished for types LCE16, LCE20, and LCE24 is a porcelain Mogul (Cat. No. HL8751); for type LCE12, a porcelain



LCE SERIES FLOODLIGHT PROJECTORS

medium screw base (Cat. No. HL9131); and for types LDA10 and LDE10, a porcelain medium screw base (Cat. No. HL6019).

Wiring connections on the type LCE projector are made to a box with a cover having a threaded hub, and with binding posts. A CGB25 connector or stuffing box is provided for making a watertight connection to the lead wire. This connector has a rubber bushing which will clamp flexible cord from $\frac{1}{2}$ to $\frac{5}{8}$ -inch diameter. CGB240 connector with lead sleeve for connecting to armored cable from $\frac{3}{4}$ to $\frac{5}{8}$ -inch diameter will be supplied without additional charge, if specified on the order. Wiring connections on the types LDE and LDA are made through a watertight stuffing box.

LCE floodlights are furnished with crystal glass reflectors with either smooth or hammered surface. Hammered glass reflectors can be supplied with these projectors and are recommended in conjunction with the clear lenses, wherever a narrow beam of high candle power is not required. The hammered surface eliminates the filament images and uneven appearance of the beam which is generally produced by the large filament of a standard lighting service lamp, and leaves a beam which is wider but more uniform.

Clear, convex, heat-resisting lenses are standard for these floodlights, but spread or diffusing, convex, heat-resisting lens will be furnished without additional charge for LCE12 and LCE16, and at a slight additional charge for LCE20 and LCE24, if specified on the order.

The finish on the cast aluminum projectors is: case, natural aluminum; base and trunnion, galvanized. On the cast iron projectors the finish is galvanized.

The focusing mechanism of these projectors is one-way, hand operated by a wing nut on the rear of the case.

Floodlight catalog will be sent upon request.



Type LCA12
Quadrant Mounting



Type LDA10
Quadrant Mounting



Type LDE10
Trunnion Mounting



